

HOW ROTOGRAVURE MAKES A PICTURE

**Photogravure Process Adapted
to a Cylinder for Printing
at a Rapid Rate.**

SHOWN IN CHRISTMAS TIMES

**All Times Pictorial Sections Will
Soon Be Made by This New
Method.**

Since the announcement was made that the special section of the Christmas Number of THE NEW YORK TIMES devoted to the Girl of To-day would be printed by the rotogravure method there has been some demand for an explanation of this new printing process in terms that would be as nearly untechnical as possible. The Christmas edition will be published on Sunday, Dec. 7.

Photoengraving, the process that is ordinarily used in reproducing photographs in newspapers, reproduces a picture on the same principle that type prints. The high portions of the engraving receive the ink, and with it make an impression upon the paper. In photogravure it is not the high points or lines that print but the depressions. It is a reversal of the other process, and the ink is sucked in by the paper passing over it. Ordinary photogravure is a slow and expensive process, and requires a flat press. In order to meet the demands of a modern newspaper, some process that would be fast, adaptable to a rotary press, and whose cost must be within reason had to be found. This has been discovered in rotogravure.

Everybody is familiar with the kind of copper plate from which a visiting card is made, and knows that the name appears with the letters hollowed out instead of being raised, as with type. Usually this is done by etching. In photogravure the process is similar, except that the lines of the picture are not so deeply etched. If you were to print from an ordinary copper plate on which a photograph had been etched at the same speed with which a rotary press is run the result would be a blur. Now rotogravure is, in a few words, the perfection of photogravure, so that it can be run upon a rotary instead of a flat press, and thus at a great rate of speed. This having been accomplished, the process has become available for newspaper purposes.

In rotogravure a picture is etched upon

a copper cylinder which, revolving in contact with a trough of ink, is entirely covered with the ink. How to get the ink quickly off the parts of the cylinder that do not contain the picture without at the same time scraping off the delicate engraving was the problem that was solved by Dr. Mertens of Germany some years ago. The invention that makes rotogravure possible is a knife, made of metal of a certain temper, which is in contact with the surface of the cylinder after it has passed the ink trough, thus removing all the ink except that in the depression, which is the picture. The cylinder thus cleansed of superfluous ink continues its revolution and, encountering the paper under pressure, transfers the picture to it.

The process is being used somewhat in Germany and in England, having been introduced into the latter country recently by The London Illustrated News with great success. Since Mertens's invention was made the process has been greatly improved upon.

The rotogravure presses for THE TIMES are now being built in Germany, and it will not be very long before the process will be used in making all the pictorial sections of this newspaper. There are those whose enthusiasm over the new process has led them to predict that all printing will eventually be done by this intaglio method. For the present it is impracticable for papers with large circulation to do more than employ it for fine art work.

The rotogravure section will be only one of the three special supplements which THE TIMES will issue as a part of the Christmas Number, for besides the Girl of To-day section and the regular Pictorial Supplement, which closely follows the news of the day, there will be

a special color supplement, containing, in three parts, a reproduction in the three original colors of John S. Sargent's famous frieze "The Prophets," which is one of the principal mural decorations of the Boston Public Library. The whole Sargent picture measures fifty-five inches long by ten inches wide, and is suitable for framing.